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SDS electrophoresis buffer, 5×

15.1 g Tris base

72.0 g glycine

5.0 g SDS

H₂O to 1000 ml

Dilute to 1× or 2× for working solution, as appropriate

Do not adjust the pH of the stock solution, as the solution is pH 8.3 when diluted. Store at 0° to 4° C until use (up to 1 month).

SED (standard enzyme diluent)

20 mM Tris-Cl, pH 7.5

500 µg/ml bovine serum albumin (Pentax Fraction V)

10 mM 2-mercaptoethanol

Store up to 1 month at 4° C

Sodium acetate, 3 M

Dissolve 408 g sodium acetate·3H₂O in 800 ml H₂O

Add H₂O to 1 liter

Adjust pH to 4.8 or 5.2 (as desired) with 3 M acetic acid

Sodium acetate buffer, 0.1 M

Solution A: 11.55 ml glacial acetic acid/liter (0.2 M).

Solution B: 27.2 g sodium acetate (NaC₂H₃O₂·3H₂O)/liter (0.2 M).

Referring to Table A.2.2 for desired pH, mix the indicated volumes of solutions A and B, then dilute with H₂O to 100 ml. (See Potassium acetate buffer recipe for further details.)

Sodium phosphate buffer, 0.1 M

Solution A: 27.6 g NaH₂PO₄·H₂O per liter (0.2 M).

Solution B: 53.65 g Na₂HPO₄·7H₂O per liter (0.2 M).

Referring to Table A.2.3 for desired pH, mix the indicated volumes of solutions A and B, then dilute with H₂O to 200 ml. (See Potassium phosphate buffer recipe for further details.)

SSC (sodium chloride/sodium citrate), 20×

3 M NaCl (175 g/liter)

0.3 M Na₃citrate·2H₂O (88 g/liter)

Adjust pH to 7.0 with 1 M HCl

STE buffer

10 mM Tris-Cl, pH 7.5

10 mM NaCl

1 mM EDTA, pH 8.0

TAE (Tris/acetate/EDTA) electrophoresis buffer

50× stock solution:

242 g Tris base

57.1 ml glacial acetic acid

37.2 g Na₂EDTA·2H₂O

H₂O to 1 liter

Working solution, pH ~8.5:

40 mM Tris-acetate

2 mM Na₂EDTA·2H₂O

TBE (Tris/borate/EDTA) electrophoresis buffer

10× stock solution, 1 liter:

108 g Tris base (890 mM)

55 g boric acid (890 mM)

40 ml 0.5 M EDTA, pH 8.0 (20 mM)